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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/920,607 | 07/31/2001 | Jeremy Minshull | 02-106410US | 3959 |

30560 7590 03/26/2004

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EXAMINER

TRAN, MY CHAU T

ART UNIT PAPER NUMBER

1639

15

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/920,607

Applicant(s)

MINSHULL ET AL.

Examiner

MY-CHAU T TRAN

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the corresp ndence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 July 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-130 is/are pending in the application.
- 4a) Of the above claim(s) 1-68 and 73-130 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 69-72 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 July 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
- Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- Notice of Informal Patent Application (PTO-152)
- Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-130 are pending.
2. This application claims priority to two provisional applications. These applications are 60/222, 056 filed 7/31/2000 and 60/244,764 filed 10/31/2000.
3. Claims 1-66, and 73-130 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9 filed 10/22/02.

Election/Restrictions

4. Applicant's election without traverse of Group C (Claims 69-72) in Paper No. 12, filed 7/30/03, is acknowledged.
5. Claims 67-68 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 12, filed 7/30/03.
6. Claims 69-72 are treated on the merit in this Office Action.

Claim Rejections - 35 USC § 112

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7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 69-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the plurality comprises" of claim 69 is vague and indefinite because it is unclear as to what plurality is it referring to. That is the polypeptides or the support?

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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10. Claims 69-70, and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Pirrung et al. (US Patent 5,143,854).

Pirrung et al. disclose a polypeptide array (biosensor) (Abstract; col. 8, lines 17-33). The array comprises a substrate (solid support), peptides attached to the substrate, a detection system (col. 4, lines 9-27; col. 8, lines 17-33). The substrate comprises about 100 different monomer sequences of peptides (polypeptides having different analytes binding specificities) (col. 6, lines 9-20; col. 15, line 64 to col. 16, line 1), fluorescently labeled receptors that bind to the polymers sequences (optically detectable element) (col. 4, lines 6-8), and a detection apparatus (display) (fig. 9). Therefore, the polypeptide array of Pirrung et al. anticipates the presently claimed apparatus.

11. Claims 69-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Heller et al. (US Patent 5,605,662).

Heller et al. disclose a self-addressable self-assembling microelectronic system (biosensor) (Abstract; col. 5, lines 24-34). The system comprises an array of electronically self-addressable microscopic locations wherein each location contains microelectrode (conductive element) supported by a substrate (solid support), permeation layer, and an attachment layer for covalent coupling of specific binding entities (col. 6, lines 43-50). The specific binding entities include peptides and each micro-location comprises different peptides (polypeptides having different analytes binding specificities) (col. 5, lines 24-34; col. 6, lines 24-40). The permeation layer and an attachment layer comprise an aminopropyltriethoxy silane (non-biological polymeric matrix) (col. 13, lines 60-66). The system further comprises a detection system that

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includes an optical imaging detector (display) (col. 5, lines 61-64; col. 20, lines 43-51).

Therefore, the microelectronic system of Heller et al. anticipates the presently claimed apparatus.

12. Claims 69-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner et al. (US Patent 6,329,209 B1; *filing date 7/14/1999*).

Wagner et al. discloses an array (biosensor) of protein-capture agents (Abstract; col. 2, line 63 to col. 3, line 9). The array comprises a substrate (solid support), an organic thin film (polymeric matrix), and a plurality of different protein-capture agents (col. 2, line 63 to col. 3, line 9; col. 11, lines 1-56). The protein-capture agents comprise polypeptides (col. 4, line 48-67; col. 5, lines 16-33). The organic thin film comprises a polymer such as a hydrogel (non-biological polymeric matrix) (col. 7, lines 57-65; col. 8, lines 5-15; col. 15, lines 33-47). The array further comprise of an optical detection system (display) (col. 33, line 49 to col. 34, line 9). Therefore, the polypeptide array of Wagner et al. anticipates the presently claimed apparatus.

Conclusion

13. No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T TRAN whose telephone number is 571-272-0810. The examiner can normally be reached on Mon.: 8:00-2:30; Tues.-Thurs.: 7:30-5:00; Fri.: 8:00-3:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW WANG can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct

March 23, 2004


PADMASHRI PONNALURI
PRIMARY EXAMINER